Summary of the Invention

Currently, it is an object of the present invention to provide an electronic mobile wireless device for collecting data at a remote location and transferring the data to a storage at a host location.

As shown in FIG. 1 of the related art, a remote device 25 of a mobile host 10 includes a wireless module 20, a memory module 15 and may also include a memory module such as a Sony Memory Stick, when the Memory Stick is full, another memory stick will be interchanged therein. The data at the remote device will be transmitted to the base station 40 and further transmitted to a storage server 60 thorough the internet via a router device 50.

Such storage facilities 70 located at the storage server may include, for example, Sony's Image Station, or America On-Line's "Get Pictures", and Yahoo Pictures, etc.. In an alternate manner the Memory Stick with the data will be decoupled from a remote device and coupled to the computer (not shown) with a memory stick slot and internet connectivity.

The present invention is directed to a system and method that provides a way of directly storing at least a portion of collected data to an external host memory system.

The wireless modem device provides a conveniently mobile device which receives data and transfers that data in real time to a separate storage service at a remote location.

Hence, the present invention fulfills a need for mobile devices of acting as a buffer memory device that periodically transfers data to an external storage memory, which can easily be accessed by a plurality of host processes for processing the collected data.

Further, since the external storage memory already exists for use by other device functions, utilizing the unused space of the external device memory increases overall hardware efficiency.

In one embodiment, the present invention is directed to a system for managing data generated by mobile source or sources and includes a host system with

a storage unit, wherein the host unit and storage unit is coupled by a wireless modem so as to operate periodically to receive data from one or more mobile devices, transfer the data at a predetermined point determined by a threshold (i.e., storage capacity, etc.), and empty the redundant data in the mobile unit when a transfer of data is

5   completed.

In another embodiment, the present invention is directed to a method for managing data in a mobile device, including receiving data from one or more sources to a host device, and storing that data in a memory stick like device within the host device, transferring the data from the memory stick device to a location upon

10   reaching a predetermined condition, and then repeating the process. Further, if the data which is addressed at the mobile device, and the integrated available memory is sufficient or near capacity, the data can be transferred immediately to server device where such data can be easily retrieved.

The features of the invention believed to be novel are set forth with

15   particularity in the appended claims. The invention itself however, both as to organization and method of operation, together with further objects and advantages thereof, may be best understood by reference to the following description taken in conjunction with the accompanying drawing.

Brief Description of the Drawing

20   The following detailed description, given by way of example, and not intended to limit the present invention solely thereto, will best be understood in conjunction with the accompanying drawings in which:

FIG. 1 shows a block diagram illustrating an overview of a related device.

25   FIG. 2 shows a block diagram of the wireless module.

FIG. 3 shows a block diagram overview of an illustrated embodiment of a system according to the present invention.

FIG. 4 shows a block diagram overview of a system according to the present invention, which includes a data collection function.

FIG. 5 shows a block diagram overview of a system according to the present invention, which includes the threshold space determination functionality according to the present invention.

FIG. 6 shows a block diagram overview of a system according to the present invention, which includes a data flow of transmitting data.

Detailed Description of the Invention

While the present invention has been particularly shown and described with reference to a preferred embodiment(s), it will be understood that various changes and modifications may be made without departing from the spirit and scope of this invention. It is intended that the appended claims be interpreted to cover the embodiments described herein and all equivalents thereto.

Turning to FIG. 2, a system block diagram of the wireless module is shown. The wireless module 100 includes an antenna 110 connected to a transceiver circuit. The transceiver circuit 115 is made up of a duplexer 120, a transmitter 130, and a receiver 140 connected therein. The transmitter 120 and receiver 140 of the transceiver circuit are connected to a baseband signal processor circuit 150. The baseband signal processor circuit 150 is connected to a microprocessor 170, which are in turn connected to memories (160) and to an interface input/output (I/O) 180. A host or peripheral unit/device is also used to connect to the wireless module 100 via interface I/O (180).

In a receive mode operation, wireless module 100 receives signals containing data packets via antenna 110 and forwards the received signals and data packets to the duplexer 120, through receiver 140, and to the baseband signal processor circuit 150. The data packets are then forwarded to microprocessor 170 and through interface I/O to the host. For example, the host device may be a PC, laptop, PDA, wireless telephone, or any other type of device or unit which receives the data packets/received signals.

In a transmit mode operation, the wireless module 100 receives data from memory and the wireless module 100 then transmits data packets utilizing at